

Bovine Spongiform Encephalopathy in North America

April 18, 2006



The current theory is that BSE entered North America through cattle imported from the UK during the 1980's; 182 UK cattle were imported directly into Canada and 300 into the US from 1982 to 1990. Native cattle were most likely exposed to BSE by eating a ration containing meat and bone meal contaminated with infectious material. In 1997, both the US and Canada introduced measures to safeguard cattle feed.

In October 2005, the Food and Drug Administration proposed a rule to strengthen the current animal feed controls; the rule should be finalized in July 2006. The proposal would ban the use in **all animal feed** of cattle parts most likely to spread BSE. The banned materials would include:

- Brain and spinal cord from cattle 30 months of age and older, and from cattle of any age not inspected and passed for human consumption,
- The entire carcass of cattle not inspected and passed for human consumption if the brain and spinal cord have not been removed,
- Tallow derived from materials prohibited by this proposed rule that contains more than 0.15% insoluble impurities, and
- Mechanically separated beef.

What Should Producers Do?

- Comply with the feed ban - **do not feed products containing prohibited materials.**
- Keep copies of all feed records – invoices and labels – for at least one year.
- Establish an individual animal identification plan for your herd, and keep accurate records when animals enter and leave the herd.
- **Report cattle with neurological signs to your veterinarian.**
- Dispose of carcasses appropriately, such as with a licensed renderer.
- Help to ensure that unsafe meat does not enter the human food chain.

Nine cases to date...

To date, nine Bovine Spongiform Encephalopathy (BSE) cases have been diagnosed in North America:

- 1993 – cow from United Kingdom (UK), killed in Canada
- May 2003 – cow from Saskatchewan, Canada
- December 2003 - cow killed in Washington State, from Alberta, Canada
- January 2005 – two cows from Alberta, Canada
- June 2005 – cow born in Texas, US
- January 2006 – cow from Alberta, Canada
- March 2006 – cow killed in Alabama, US
- April 2006 – cow from British Columbia, Canada

Case 1: In 1993, one of the monitored UK cattle tested positive for BSE in Alberta, and was diverted from the human food and animal feed systems. Canada depopulated all their remaining UK cattle.

Case 2: On May 20, 2003, Canada confirmed BSE in an Angus cow born in Saskatchewan in March 1997. The cow did not enter the human food chain; the remains entered the feed system through a rendering facility in Alberta. The herd of origin and other animals of interest were slaughtered: more than 2,700 cattle were culled and over 2,000 tested negative for BSE in this investigation.

Case 3: On December 25, 2003, the USDA confirmed BSE in a Holstein cow slaughtered in Washington State. The cow was born in April 1997 in Alberta, and entered the US in 2001 as part of a shipment of 81 animals. Over 255 cattle were depopulated from 10 premises in this investigation; all tested BSE negative.

Case 4: On January 2, 2005, BSE was confirmed in a Holstein cow born in Alberta in October 1996. No part of the cow entered the human or animal food chain. Over 130 animals were traced; those located alive were culled and tested negative for BSE.

Case 5: On January 11, 2005, BSE was confirmed in a Charolais cow born in Alberta in March 1998. No part of the animal entered the human or animal food chain. Over 350 animals were investigated, and 41 were culled and tested negative for BSE.

Case 6: On June 24, 2005, BSE was confirmed in a 12-year-old Brahma-cross cow born in Texas. No part of this animal entered the human or animal food chain. Over 200 cattle were investigated.

Case 7: On January 23, 2006, BSE was confirmed in a six-year-old crossbred cow with signs of BSE in Alberta. No part of the animal entered the human or animal food chain. A total of 156 cattle were investigated and no additional cases of BSE were detected.

Case 8: On March 13, 2006, BSE was confirmed in a crossbred beef cow in Alabama, US. An epidemiological investigation is ongoing to identify the herd of origin and other cattle of interest.

Case 9: On April 16, 2006, BSE was confirmed in a 6-year-old dairy cow from British Columbia, Canada. The case investigation is ongoing.

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